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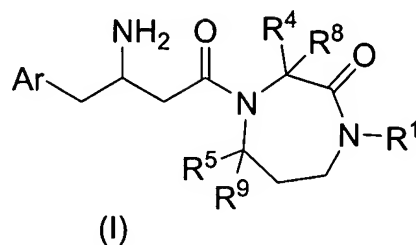
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 Case No.: 21247YP
 Page No.: 3

Amendment to the Claims:

Add new Claims 30-33.

Listing of Claims:

Claim 1 (originally presented): A compound of the formula I:



or a pharmaceutically acceptable salt thereof; wherein
 each n is independently 0, 1, or 2;

Ar is phenyl substituted with one to five R³ substituents;R¹ is selected from the group consisting of

hydrogen,

C₁-10 alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents
 independently selected from halogen, hydroxy, C₁-6 alkoxy, carboxy, C₁-6
 alkyloxycarbonyl, and phenyl-C₁-3 alkoxy, wherein alkoxy is unsubstituted or
 substituted with one to five halogens,

(CH₂)_n-aryl, wherein aryl is unsubstituted or substituted with one to five substituents
 independently selected from halogen, CN, hydroxy, R², OR², NHSO₂R²,
 NR²SO₂R², SO₂R², CO₂H, and C₁-6 alkyloxycarbonyl,

(CH₂)_n-heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three
 substituents independently selected from hydroxy, halogen, C₁-6 alkyl, and C₁-6
 alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five
 halogens,

(CH₂)_n-heterocyclyl, wherein heterocyclyl is unsubstituted or substituted with one to three
 substituents independently selected from oxo, hydroxy, halogen, C₁-6 alkyl, and C₁-

6 alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,
(CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; and
wherein any methylene (CH₂) carbon atom in R¹ is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C₁₋₄ alkyl unsubstituted or substituted with one to five halogens;

each R³ is independently selected from the group consisting of

hydrogen,
halogen,
cyano,
hydroxy,
C₁₋₆ alkyl, unsubstituted or substituted with one to five halogens,
C₁₋₆ alkoxy, unsubstituted or substituted with one to five halogens,
carboxy,
alkoxycarbonyl,
amino,
NHR²,
NR²R²,
NHSO₂R²,
NR²SO₂R²,
NHCOR²,
NR²COR²,
NHCO₂R²,
NR²CO₂R²,
SO₂R²,
SO₂NH₂,
SO₂NHR², and
SO₂NR²R²;

each R^2 is independently C_{1-6} alkyl, unsubstituted or substituted with one to five substituents independently selected from halogen, CO_2H , and C_{1-6} alkyloxycarbonyl;

R^4 and R^5 are independently selected from the group consisting of:

hydrogen,

cyano,

carboxy,

C_{1-6} alkyloxycarbonyl,

C_{1-10} alkyl, unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C_{1-6} alkoxy, carboxy,

C_{1-6} alkyloxycarbonyl, and phenyl- C_{1-3} alkoxy, wherein alkoxy is unsubstituted or substituted with one to five halogens,

$(CH_2)_n$ -aryl, wherein aryl is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C_{1-6} alkyl, and C_{1-6} alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

$(CH_2)_n$ -heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three substituents independently selected from hydroxy, halogen, C_{1-6} alkyl, and C_{1-6} alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

$(CH_2)_n$ -heterocyclyl, wherein heterocyclyl is unsubstituted or substituted with one to three substituents independently selected from oxo, hydroxy, halogen, C_{1-6} alkyl, and C_{1-6} alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

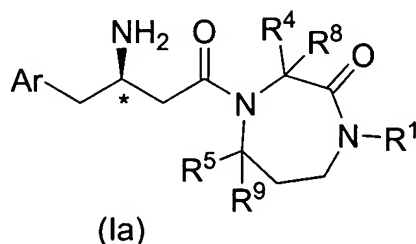
$(CH_2)_n$ - C_{3-6} cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C_{1-6} alkyl, and C_{1-6} alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

$(CH_2)_nCONR^6R^7$, wherein R^6 and R^7 are independently selected from the group consisting of hydrogen, tetrazolyl, thiazolyl, $(CH_2)_n$ -phenyl, $(CH_2)_n$ - C_{3-6} cycloalkyl, and C_{1-6} alkyl, wherein alkyl is unsubstituted or substituted with one to five halogens and wherein phenyl and cycloalkyl are unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C_{1-6} alkyl,

and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens;
or wherein R⁶ and R⁷ together with the nitrogen atom to which they are attached form a heterocyclic ring selected from azetidine, pyrrolidine, piperidine, piperazine, and morpholine; and wherein said heterocyclic ring is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; and wherein any methylene (CH₂) carbon atom in R⁴ or R⁵ is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C₁₋₄ alkyl unsubstituted or substituted with one to five halogens; and

R⁸ and R⁹ are each independently hydrogen or C₁₋₆ alkyl.

Claim 2 (originally presented): The compound of Claim 1 of the formula Ia:



wherein the carbon atom marked with an * has the *R* configuration and Ar, R¹, R⁴, R⁵, R⁸, and R⁹ are as defined in Claim 1.

Claim 3 (originally presented): The compound of Claim 1 wherein R³ is selected from the group consisting of
hydrogen,
halogen,
cyano,
hydroxy,
C₁₋₆ alkyl, unsubstituted or substituted with one to five halogens, and
C₁₋₆ alkoxy, unsubstituted or substituted with one to five halogens.

Claim 4 (originally presented): The compound of Claim 3 wherein R³ is selected from the group consisting of hydrogen, fluoro, chloro, bromo, trifluoromethyl, and methyl.

Claim 5 (originally presented): The compound of Claim 4 wherein R³ is hydrogen, chloro, or fluoro.

Claim 6 (originally presented): The compound of Claim 1 wherein R¹ is selected from the group consisting of:

hydrogen,

C₁₋₆ alkyl, wherein alkyl is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkoxy, carboxy, C₁₋₆ alkyloxycarbonyl, and phenyl-C₁₋₃ alkoxy, wherein alkoxy is unsubstituted or substituted with one to five halogens,

(CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens; and

wherein any methylene (CH₂) carbon atom in R¹ is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C₁₋₄ alkyl unsubstituted or substituted with one to five halogens.

Claim 7 (originally presented): The compound of Claim 6 wherein R¹ is selected from the group consisting of

hydrogen,

C₁₋₄ alkyl,

2,2,2-trifluoroethyl,

methoxycarbonylmethyl,

carboxymethyl,

hydroxyethyl,

benzyloxymethyl,

benzyloxyethyl, and

cyclopropyl.

Claim 8 (originally presented): The compound of Claim 7 wherein R¹ is selected from the group consisting of hydrogen, methyl, *tert*-butyl, and cyclopropyl.

Claim 9 (originally presented): The compound of Claim 1 wherein R⁴ and R⁵ are independently selected from the group consisting of:

hydrogen,

C₁₋₁₀ alkyl, unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkoxy, carboxy, C₁₋₆ alkyloxycarbonyl, and phenyl-C₁₋₃ alkoxy, wherein alkoxy is unsubstituted or substituted with one to five halogens,

(CH₂)_n-aryl, wherein aryl is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

(CH₂)_n-heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three substituents independently selected from hydroxy, halogen, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

(CH₂)_n-heterocyclyl, wherein heterocyclyl is unsubstituted or substituted with one to three substituents independently selected from oxo, hydroxy, halogen, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

(CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

wherein any methylene (CH₂) carbon atom in R⁴ or R⁵ is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C₁₋₄ alkyl unsubstituted or substituted with one to five halogens.

Claim 10 (originally presented): The compound of Claim 9 wherein R⁴ and R⁵ are independently selected from the group consisting of:

hydrogen,

C₁₋₆ alkyl, unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkoxy, carboxy, C₁₋₆ alkyloxycarbonyl, and phenyl-C₁₋₃ alkoxy, wherein alkoxy is unsubstituted or substituted with one to five

halogens,

(CH₂)_n-aryl, wherein aryl is unsubstituted or substituted with one to five substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

(CH₂)_n-heteroaryl, wherein heteroaryl is unsubstituted or substituted with one to three substituents independently selected from hydroxy, halogen, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens,

(CH₂)_n-C₃₋₆ cycloalkyl, wherein cycloalkyl is unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C₁₋₆ alkyl, and C₁₋₆ alkoxy, wherein alkyl and alkoxy are unsubstituted or substituted with one to five halogens, and

wherein any methylene (CH₂) carbon atom in R⁴ or R⁵ is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C₁₋₄ alkyl unsubstituted or substituted with one to five halogens.

Claim 11 (originally presented): The compound of Claim 10 wherein R⁴ and R⁵ are independently selected from the group consisting of:

hydrogen,

CH₃,

CH₂CH₃,

CH₂CH(CH₃)₂,

CH₂-cyclopropyl,

CH₂-cyclohexyl,

CH₂OCH₂Ph,

CH₂OH

CH₂Ph,
CH₂(3-OCF₃-Ph),
CH₂(4-OCF₃-Ph),
CH₂(3-CF₃,5-CF₃-Ph),
CH₂(2-CF₃-Ph),
CH₂(2-Cl-Ph),
CH₂(2-Me-Ph),
CH₂(2-Me,5-Me-Ph),
CH₂(2-Ph-Ph),
CH₂(2-F,5-F-Ph),
CH₂(2-F-Ph),
CH₂(2-F,3-F-Ph),
CH₂(2-pyridinyl),
CH₂(3-pyridinyl),
CH₂(4-pyridinyl),
CH₂(1-oxidopyridin-2-yl),
CH₂(1-oxidopyridin-3-yl),
CH₂(1*H*-pyrazol-1-yl),
CH₂(2-F,6-F-Ph), and
CH₂CF₃.

Claim 12 (originally presented): The compound of Claim 11 wherein R⁵ is hydrogen.

Claim 13 (originally presented): The compound of Claim 1 wherein R⁸ and R⁹ are independently selected from hydrogen and methyl.

Claim 14 (originally presented): The compound of Claim 13 wherein R⁸ and R⁹ are hydrogen.

Claim 15 (originally presented): The compound of Claim 1 wherein R¹ is selected from the group consisting of

hydrogen,
C₁₋₄ alkyl,
2,2,2-trifluoroethyl,
methoxycarbonylmethyl,
carboxymethyl,
hydroxyethyl,
benzyloxymethyl,
benzyloxyethyl, and
cyclopropyl;

R³ is hydrogen, chloro, or fluoro;

R⁴ is selected from the group consisting of:

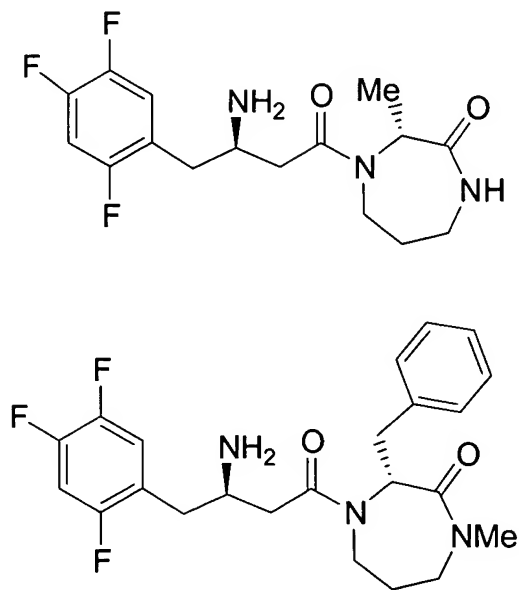
hydrogen,
CH₃,
CH₂CH₃,
CH₂CH(CH₃)₂,
CH₂-cyclopropyl,
CH₂-cyclohexyl,
CH₂OCH₂Ph,
CH₂OH
CH₂Ph,
CH₂(3-OCF₃-Ph),
CH₂(4-OCF₃-Ph), and
CH₂(3-CF₃,5-CF₃-Ph)
CH₂(2-CF₃-Ph),
CH₂(2-Cl-Ph),
CH₂(2-Me-Ph),
CH₂(2-Me,5-Me-Ph),
CH₂(2-Ph-Ph),
CH₂(2-F,5-F-Ph),
CH₂(2-F-Ph),
CH₂(2-F,3-F-Ph),
CH₂(2-pyridinyl),

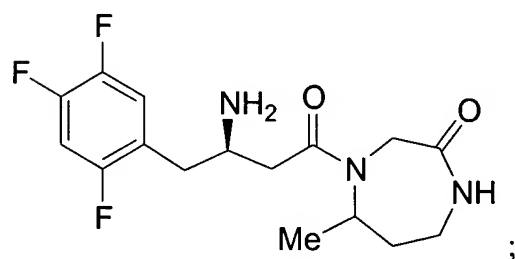
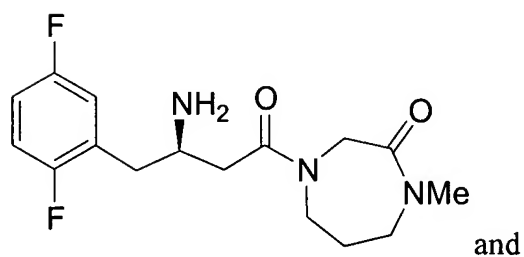
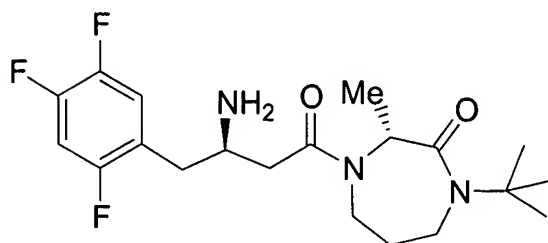
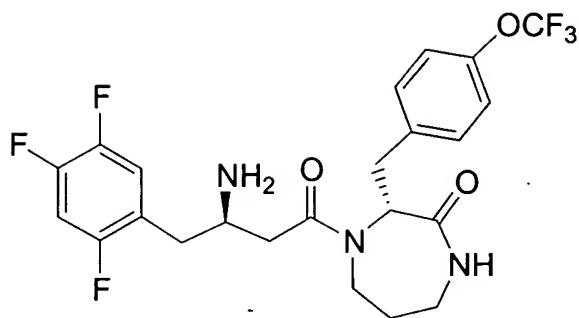
CH₂(3-pyridinyl),
 CH₂(4-pyridinyl),
 CH₂(1-oxidopyridin-2-yl),
 CH₂(1-oxidopyridin-3-yl),
 CH₂(1*H*-pyrazol-1-yl),
 CH₂(2-F,6-F-Ph), and
 CH₂CF₃; and

R⁸ and R⁹ are hydrogen.

Claim 16 (originally presented): The compound of Claim 15 wherein R⁵ is hydrogen.

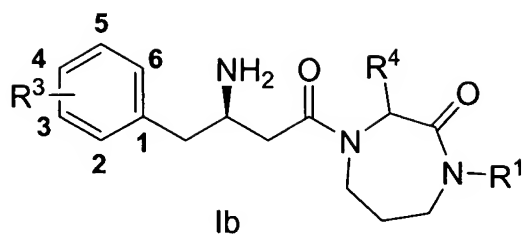
Claim 17 (originally presented): The compound of Claim 15 which is selected from the group consisting of





or a pharmaceutically acceptable salt thereof.

Claim 18 (originally presented): The compound of Claim 15 of structural formula Ib selected from the group consisting of



<u>R³</u>	<u>R⁴</u>	<u>R¹</u>
2-F, 5-F	Me	H
2-F, 4-F, 5-F	CH ₂ -cPr	H
2-F, 4-F, 5-F	Me	Me
2-F, 5-F	Me	Et
2-F, 4-F, 5-F	Me	cPr
2-F, 5-F	Me	CH ₂ CO ₂ Me
2-F, 4-F, 5-F	Me	CH ₂ CH ₂ OH
2-F, 4-F, 5-F	Me	CH ₂ CH ₂ OCH ₂ C ₆ H ₅
2-F, 4-F, 5-F	Et	Me
2-F, 5-F	Et	Me
2-F, 4-F, 5-F	CH ₂ OH	Me
2-F	CH ₂ Ph	Me
3-F, 4-F	CH ₂ Ph	Me
2-F, 4-F, 5-F	CH ₂ OCH ₂ Ph	Me
2-F, 4-F, 5-F	Et	H
2-F, 4-F, 5-F	CH ₂ Ph	H
3-F, 4-F	CH ₂ Ph	H
2-F, 5-F	CH ₂ (4-OCF ₃ -Ph)	H

2-F, 4-F, 5-F	CH ₂ (3-OCF ₃ -Ph)	H
2-F, 4-F, 5-F	CH ₂ CH(CH ₃) ₂	Me
2-F, 4-F, 5-F	CH ₂ (3-CF ₃ ,5-CF ₃ -Ph)	H
2-F, 5-F	H	H
2-F, 4-F, 5-F	CH ₂ (2-CF ₃ -Ph)	H
2-F, 4-F, 5-F	CH ₂ (2-Cl-Ph)	H
2-F, 4-F, 5-F	CH ₂ (2-CH ₃ -Ph)	H
2-F, 4-F, 5-F	CH ₂ (2-CH ₃ ,5-CH ₃ -Ph)	H
2-F, 4-F, 5-F	Me	CHMe ₂
2-F, 4-F, 5-F	CH ₂ (2-Ph-Ph)	H
2-F, 4-F, 5-F	CH ₂ (2-F,5-F-Ph)	H
2-F, 4-F, 5-F	CH ₂ (2-F-Ph)	H
2-F, 4-F, 5-F	Me	CH ₂ CF ₃
2-F, 4-F, 5-F	CH ₂ (2-F,3-F-Ph)	H
2-F, 4-F, 5-F	CH ₂ (3-pyridyl)	H
2-F, 4-F, 5-F	CH ₂ (2-F-Ph)	CH ₂ CH ₂ CH ₃
2-F, 4-F, 5-F	CH ₂ (4-pyridyl)	H
2-F, 4-F, 5-F	CH ₂ (2-F-Ph)	Me
2-F, 4-F, 5-F	CH ₂ (2-pyridyl)	H
2-F, 4-F, 5-F	CH ₂ (2-F,6-F-Ph)	H

2-F, 4-F, 5-F	CH ₂ CF ₃	H
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or a pharmaceutically acceptable salt thereof.

Claim 19 (originally presented): A pharmaceutical composition which comprises a compound of Claim 1 and a pharmaceutically acceptable carrier.

Claim 20 (originally presented): A method for inhibiting dipeptidyl peptidase-IV enzyme activity in a mammal in need thereof which comprises the administration to the mammal of an effective amount of a compound of Claim 1.

Claim 21 (originally presented): A method for treating diabetes in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

Claim 22 (originally presented): A method for treating non-insulin dependent (Type 2) diabetes in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

Claim 23 (originally presented): A method for treating hyperglycemia in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

Claim 24 (originally presented): A method for treating obesity in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

Claim 25 (originally presented): A method for treating one or more lipid disorders selected from the group of dyslipidemia, hyperlipidemia, hypertriglyceridemia, hypercholesterolemia, low HDL and high LDL in a mammal in need thereof which comprises the administration to the mammal of a therapeutically effective amount of a compound of Claim 1.

Claim 26 (originally presented): A method for treating in a mammal in need thereof one or more conditions selected from the group consisting of (1) hyperglycemia, (2) low glucose tolerance, (3) insulin resistance, (4) obesity, (5) lipid disorders, (6) dyslipidemia, (7) hyperlipidemia, (8) hypertriglyceridemia, (9) hypercholesterolemia, (10) low HDL levels, (11) high LDL levels, (12) atherosclerosis and its sequelae, (13) vascular restenosis, (14) irritable bowel syndrome, (15) inflammatory bowel disease, including Crohn's disease and ulcerative colitis, (16) other inflammatory conditions, (17) pancreatitis, (18) abdominal obesity, (19) neurodegenerative disease, (20) retinopathy, (21) nephropathy, (22) neuropathy, (23) Syndrome X, (24) ovarian hyperandrogenism (polycystic ovarian syndrome), and other disorders where insulin resistance is a component, wherein the method comprises the administration to the mammal a therapeutically effective amount of a compound of Claim 1.

Claim 27 (originally presented): The pharmaceutical composition of Claim 19 further comprising one or more additional active ingredients selected from the group consisting of:

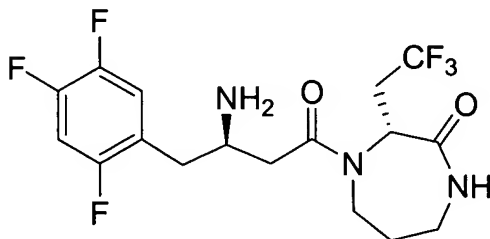
- (a) a second dipeptidyl peptidase IV inhibitor;
- (b) an insulin sensitizer selected from the group consisting of a PPAR γ agonist, a PPAR α/γ dual agonist, a PPAR α agonist, a biguanide, and a protein tyrosine phosphatase-1B inhibitor;
- (c) an insulin or insulin mimetic;
- (d) a sulfonylurea or other insulin secretagogue;
- (e) an α -glucosidase inhibitor;
- (f) a glucagon receptor antagonist;
- (g) GLP-1, a GLP-1 mimetic, or a GLP-1 receptor agonist;
- (h) GIP, a GIP mimetic, or a GIP receptor agonist;
- (i) PACAP, a PACAP mimetic, or a PACAP receptor agonist;
- (j) a cholesterol lowering agent such as (i) HMG-CoA reductase inhibitor, (ii) sequestrant, (iii) nicotinic alcohol, nicotinic acid or a salt thereof, (iv) PPAR α agonist, (v) PPAR α/γ dual agonist, (vi) inhibitor of cholesterol absorption, (vii) acyl CoA:cholesterol acyltransferase inhibitor, and (viii) anti-oxidant;
- (k) a PPAR δ agonist;
- (l) an antiobesity compound;
- (m) an ileal bile acid transporter inhibitor;

- (n) an anti-inflammatory agent; and
(o) an antihypertensive agent.

Claim 28 (currently amended): The pharmaceutical composition of Claim 27 wherein the ~~PPAR α / γ dual agonist is KRP-297~~ said biguanide is metformin.

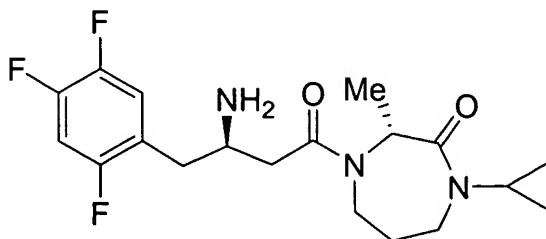
Claim 29 (currently amended): A method of treating diabetes in a mammal in need thereof comprising administering to the mammal a therapeutically effective amount of a compound of Claim 1 in combination with the ~~PPAR α / γ dual agonist KRP-297~~ metformin.

Claim 30 (new): A compound which is:



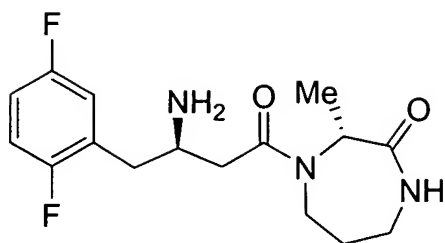
or a pharmaceutically acceptable salt thereof.

Claim 31 (new): A compound which is:



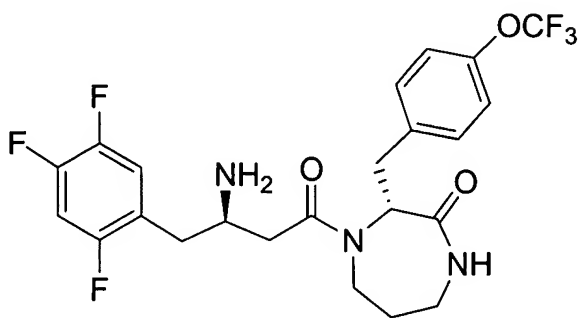
or a pharmaceutically acceptable salt thereof.

Claim 32 (new): A compound which is:



or a pharmaceutically acceptable salt thereof.

Claim 33 (new): A compound which is:



or a pharmaceutically acceptable salt thereof.